POULTRY

January 27, 1916.

LIME MUST FOLLOW ANNUAL TESTS HAVE PHOSPHORIC ACID

A Twenty-Year Experiment Sheds Eovine Tuberculesis Can Be New Light On Use of Fertilizers

phosphates, liming increased the moved. of the crops from \$442 to \$590 Can Be Eradicated

oom For a Packing-House

The three cr four outbreaks of cholera reported on last month choisers reported on last month all been suppressed by the aid of but as a general rule molasses is held to be worth too much as cattle feed to use it for making alcohol.

Industrial Alcohol bers as to cause a decided reduc-in the price paid to producers, igh hardly as yet in that paid by

If conditions continue along the favorable lines of development, will not be long before pork packermanent industry," Dr. V. A. Nor-

Imported Merinos

enty-five pure bred Merino rams e imported from Australia on the

Not As People Think

Angstrom, in a recent Smithson report, states that scientific obser tions have proved that the radiation heat from the ocean is the same at temperatures and in all latitudes.

AERO CLUB WILL OPEN EIGHT AVIATION SCHOOLS

and Scattle. More than two e achnolu.

A FORTY YEARS' TEST.

Chamberlain's Cough R medy has were curing coughs and colds for the A shipment of several tons of sizal be all dealers. Benson, Smith & Co., prices are now being realized for this Hawaiian product.

Eradicated, the Scientific Experts All Agree

Thode Island Experiment Station has now conducted continuous fertilizer ed for tuberculosis during 1915, Dr. V. experiments for twenty years with certain plots and crops, studying the effect on soils and their products of the different phesphoric acid carriers. The traults of these e periments have been the test. He said, "This means about three per cent of reactors, or apparently an increase of one per cent over last report recently published.

Damon in Bull, tin No. 163, a 560-page report recently published.

The relative lime content of the soil is apparently the conirolling factor in whether available, reverted, or insoluble phaspnoric acid produces results. In the first five years of the experiments super-phosphate gave the biggest retains on both limed and unlimed by an interease of one per cent over last year's result.—This condition which would be very discouraging were it not for the fact that not less than forty-five reactors were encountered in herds tested this year for the first time, in other, words in herds tested this year for the first time, in other, words in herds that, strictly speaking, cannot be called dairy cattle but from which miles cows are drawn from time to time.

Situation Improving

"If these herds, comprising 672 head with nearly seven per cent of reactors, were deducted from the grand total, the percentage of reactors in general would be reduced to 2.7. When it is further remembered that fifty renctors were found in two dairies where no testing had been done for sixteen months, and where the disease, consequently, had spread rapidly, it will be found that taken nitogether there is a decided improvement in the bovine tuberculosis situation in the City and County of Honolulu.

Ninety Per Cent Clean alved Phosphates and Lime
connection with this experiment nobulu.

Minety Per Cent Clean

three tons of slaked lime per acre. "It might safely be claimed that at plied to the limed phosphate plots, least ninety per cent of the local dairies the effect on limed plots receiving are now, at the end of 1915, free from

the effect on limed plots receiving to phosphorus.

The results showed that lime alone, thout phosphates, increased the value of the crops in twenty years about 100 per acre. With insoluble phosphates, ground bone, Thomas sing and are rock phosphates, lime increased the large of the crops \$330 and less. On and fertilized with dissolved bone, and believe the new sar'tary code of the territorial board of health has supplied the long needed authority for a vigorous campaign against this disease. No territorial dairy permit is now issued until a certificate of tuberculin test has been issued by one of the deputies of this board, and reacting animals removed.

neid soils the phosphorous of Under these conditions the complete ad hone was found to be the most and bone was found to be the most lable. The use of liberal amounts itrogen and potnsh tended to mask effects of different forms of phosus. The results which have been pronounced are, the cumulative progressive benefits from using phates year after year according to t program, and the increased profellowing the application of lime tituberculosis campaign, except possi-

drad million bushels of potatoes was used each year in the production of al-cohol and Gegmany had almost attained the point where it was independent of United States and Russian importations of gasoline and distillate fuel. Som alcohol is manufactured from molasse

Over 6,000 agricultural potato distil leries are in operation in Germany. There is a central marketing organization to which almost all those farmers belong and large sums of money were being spent to develop and popularize the increased use of alcohol for industrial and technical purposes. This "society of distillers for the disposal of alcohol" had long thrown the weight

of its influence against extending the use of alcohol as a beverage. Where the cultivation of potatoes is carried on extensively, it forms one of Ventura for the Parker Ranch and the best supports for rational methods of agriculture, especially where circum stances are unfavorable to the cultivastances are unitaversule to the cure no wool is now selling three cents tion of the sugar beet. This is the case and above that of ungraded sheep in the larger part of Germany. While the clip of pure breds brings potatoes require good soil and consideration margin. The Merine is best wool producer. The Parker tion is rewarded by large crops and an excellent condition of the soil for

the next crop, whatever that may be. Like Sugar Beets Since the potato demands deep cul tivation this crop accomplishes for the eastern provinces what the sugar best does for the heavier soils of the western provinces. Furthermore, the alcohol distillery makes possible the ready conversion of an unstable product into a stable one. At best, potatoes can be kept only until the warm weather of the next season sets in, whereas alcohol

The speut mash—by far the most important by product of the distillery—and the skins and watery wastes are important adjuncts to the food rations of cattle. The cattle in turn furnish for the work, officials of the Aero of America announced last night it they are ready to begin the task establishing aviation schools, at we York, Chicago, Boston, Newport was, Aujusta, Maine, Detroit, Los of the said on the manure, the by-product of the dairy barn, it is necessary to see with what scrupnious care has been kept for several years. essary to see with what scrupulous care drest sylators will be trained at it is preserved as well as with what large expenditure of time and labor the fields are manured.

Sisal Shipments placity every year. What better day morning from Kau. Hemp values mendation is required? For sale are steadily advancing and very good

Honolulu Wholesale Produce Market Quotations

ISSUED BY THE TERRITORIAL

Wholesale Only. MARKETING DIVISION BUTTER AND EGGS Broilers, 1b (2 to 3 lbs) .33 to

VEGETABLES AND PRODUCE Beans dry Beans, Mani red, cwt .. 4.50 to 5.00

Alligator-pears, doz. (none in market). Bananas, bunch, Chinese...20 to .50 Bananas, bunch, Cooking...,75 to 1.25 Breadfruit, dos.

FRUIT Oranges, Hawa., 100 . 1.00 to 1.25 LIVESTOCK

Peanuts, large, Ib

(Beef, cattle and sheep are not bought at live weight. They are taken by the ment companies dressed and paid for by weight dressed). Hogs, up to 150 lbs., lb. ... 09 to 11 Hogs, 150 lbs, and over .09 to .10 DRESSED MEATS FEED

The following are quotations on feed, f.o.b. Honolulu:

The Territorial Marketing Division is under supervision of the U. S. Experiment Station, and is at the service of all citizens of the Territory. Any produce which farmers may send to the Marketing Division is sold at the best obtainable price. A marketing charge of five per cent is made. It is highly desirable that tarmers notify the Marketing Division what and how much produce they have for sale and about when it will be ready to ship. The shipping mark of the Division is S. S. E. S. Letter address: Honolulu, P. O. Box 1237. Salesroom, Waikiki corner Maunakea and Queen streets. Telephone 1840. Wireless address. dress, TERMARK.

particularly scarce and pumpkins are sweet potato. Parties wishing to grow bringing a very good price.

Limes are in demand this weel and the marketing division at a nominal

good prices can be secured for the Mex- rate.

Chinese Extension Farm

The Chinese ministry of agriculture and commerce was granted last spring over \$100,000 for the establishmen. of demonstration farms and now has in operation three cotton farms, one sugar plantation, two forestry estates and three farms devoted to pasturage tests. There is also a model ranch at Chu Chow, at North Anhui. A system of extension teaching is also projected, starting with the establishment of an extension school for training traveling lecturers and demonstrators. The employes must be men of practical farm experience in their respective districts and are to work in co-operation with the staffs of the demonstration farms.

How Many Trees?

C. S. Judd, Territorial forester, is tabulating a report showing the number of trees planted during 1915, the species and the purpose and location of the planting.

A Timely Warning season.

J. Edgar Higgins, horticulturist at the Hawaii Experiment Station, has is sued timely warning that no citrus trees should be imported from Florida.

Duroc-Jerseys

Two very fine Duroc-Jersey boars arrived on the December trip of the Ma-noa. They are for the C. M. Cooke Estate ranch, on Molokai.

Entomological Extras

Territorial entomologist E. M. Ehrhorn in his routine report for December states that 15,000 fruit-fly parasites were turned loose during the month. Giffard's bag came first, with 13,000; Fullaway's second, for 825; and Fryon's bug only 600. Professor Fryon is an Australian entomologist and so, of course, could not give his name-sake personal encouragement. A lot of sta-ble-fly and horn-fly parasites were also bred and liberated. A new nicely-bug parasite, in dell

cate health on account of its Latin name (Paraleptomastix abnormis), could not be set at liberty during the

A Timely Warning

the Hawaii Experiment Station, has issued timely warning that no citrus trees should be imported from Florida. A very serious plant disease, known as canker, has attacked citrus orchards in Florida, and even though there is no established lemon, grape fruit, lime or orange industry in Hawaii, there might be some day. Hence it is best to be wide awake and keep citrus pests out.

D.J. Collis Browne's lorodyne, The ORIGINAL and ONLY GENUI' .E. Checks and arrests DIARRHOEA, and is FEVER, CROUP, AGUE. The Best Lemedy known for CHOLERA and COUGHS, COLDS, DYSENTERY. ASTHMA, BRONCHITIS. only Palliative in NEURALGIA, GOUT, RHEUMATISM. related, 1/1), 2/9, 4/8. J. T. Daverrouy, Ltd. London, S.E.

SPORTS

IS NOW COMPLETE

Pacific Courts Are Now Available

nis Tournament will go on sale this the Pacific Coast awimming champi

Scanon tickets for the Carnival Tennis Tournament will go on sale this morning. The price will be \$2 and will include both the singles and doubles tournaments. Tickets may be obtained from any member of the tennis committee, namely, A. L. Castle, J. Lowrey, Farry Macfarlane, G. H. Buttolph, Stanley Kennedy. The price for individual days will be fifty cents, and as seven days tennis are planned at present the purchase of a season taket will result in a great saving.

According to present plans the svent, which promises to be one of the most interesting of the whole Carnival will open on the Pacific Tennis Courts on Thursday, Pebruary 17, commencing with the doubles. Griffin and Dawson arrive from Manila February 14, and as they have played through that tournament as a team—and incidentally won the Far Eastern champlonship—shall be in good shape for the Honolula tournament, It is planned to finish the doubles with the finals caturday after non February 19.

Plenty of Accommodations

Preliminary matches will be best two sets out of three and the finals three out of five sol three counts.

San Francisco is making candy for the Pacific Coast swimp elands the program will be pulled off. As Sutro Baths, ander the auspices of the Olympid and Stoyard swimp champion. NEW ORLEANS, January 29.—Fred at the Olympid committee, of the San Francisco of the Olympid committee, namely for the horse of the men on the program and two events for women.

Invitations will be insued to Duke Kahamamoka, Lody Langer, Guorge Church, San Showing with the champion, the new Los Angeles sountation, Ernie Smith, Bob Small, Mins Frances Cowy ells and others to take part.

The following events will be decided: For men—100-yard dash; 500-yard sant, 1220-yard dash; 100-yard dash; 200-yard sant stroke; 200-yard sant stroke; 200-yard sant stroke; 200-yard sant sant part of the sant p

Preliminary matches will be best two sets out of three and the finals three out of five. Six bleachers will be used daily on the courts so that all should be accommodated without difficulty. The manks court will be used if it can be put into first class condition. The fence will be covered with green cloth to make a fine back ground for the playing.

The teams at present playing the best tennis are Griffin and Dawson of California, Beals C. Wright of Boston and Alan J. Lowrey of Honolulu, and four local teams as follows: Castle and Eklund, Hoogs and Warren, Hanoch and Dillingham, and Kennedy and O Dowds.

Beals C. Wright, the famous internationalist, and former doubles and singles champion of the United States needs no introduction to the Honolulu public. No greater court general has core in the finals are exercised and exercised an excellent program of fifteen events, the features of which

weekly market letters

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ALCHOL FROM POTATOES

Governor Pinkham has appointed A.

a. C. Atkinson a member of the board
of agriculture and forestay, view Albrett
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Ward Dawson, ranks in Class B in the United States (21-30), but on the Pacific Coast ranks number 7 in singles and with Herd No. 2 in doubles. He , lays the orthdex California game, using a severe service and hard strokes at all

times.
This tennis tournament is unquestion ably the highest class tournament which Last year with Johnston, Larned, and Breck, the public were treated to splendid matches but the class this year is higher. It is also true that the local players, who have worked hard and conscientiously for this tournament, are playing in much better shape than ever before. Although it is not expected that in singles the local players will force the visitors to their limit, nevertheless if either Eklund or Lowrey hits his top form during a match, it will be close enough to make the fun fly. In doubles Castle and Eklund have a fine chance, it being remembered that they decisively beat Johnston and Breck last

Blackie! Keehu, said to be the best pitcher in the league. But it was evidently his off day and the Waikapus found three runs off him in the eighth, making six runs altogether. Score by innings:

ke! W. Cockett.

Umpire, George H. Cummings; scor-

Season Tickets For Matches At Hawaiian Champion Asked T Swim At Pacific Coast Championships in March

Season tickets for the Carnival Ten- San Francisco is making condy for

Army Athletes Working Hard To Be Fit For Military Athletic

Events

FORT SHAFTER, January 30 .- Th mories and scenes of college days are foreibly brought to mind when one witnesses the afternoon practise of the Fort Shafter contestants for the Carni-val athletic meet. With dozens of can-didates for each event and interested didates for each event and interested throngs of spectators watching their practise, the air is pregnant with the spirit of friendly rivalry and the prospect of exciting days to come. Capt. Paul B. Malone, Second Infantry, in general charge of the training of the competitors, has assigned his assistants to work as follows. Capt. Charles I. to work as follows. Capt. Charles L. McKain, Second Infantry, in charge of the contestants for the baseball throwing contest, Capt. Edwin S. Hartsborn Second Infantry, in charge of the swim

Second Lieut. Douglass T. Greene cond Infantry, is training the entries Second Lieut. Douglass T. Greene, Second Infantry, is training the entries for the sack race, the centipede race, the shoe race, and the three-legged race. Second Lieut. Charles B. Lyman, Second Lieut. Charles B. Lyman, Second Infantry, has in charge the sprinter—the 100-yard dash men, the 220-yard dash men, and the one-mile relay men, Second Lieut. Woodfin T. Jones, Second Infantry, has control of the walkapus, and were whitewashed by a score of 6 to 0," says the Maui News of January 28.

"Kala Pelekai, the slabster of the Waikapus, is deing good work and it is mostly due to his pitching that his team carried the long end of the score in Sunday's game.

"E. Bodrigues first pitched for the Saints and his benders were somewhat puzzling to the other side. He held them down to three runs for six innings when he was replaced in the seventh by 'Blackie' Keehu, said to be the best pitcher in the league. But it was evi-

RECORD OF MOTORBIKE

E. G. Baker, who recently passed through Hapolulu en route to Australia hung up a new world's record when he drove an Indian Power-Plus motorcycle of 50 miles an hour. Baker will arrive Per Year, Foreign \$4.00 in Honolulu February 29, and may give Payable Invariably in Advance.

GERMANS WIN FIRST

Liffith, Jan. 23.—Much enthusiaam was manifested at the ball game of the Junior League between the German and Hawaiian tenam heid in Lihne today. These two teams are fighting hard for the championship and in this game the Germans gained a step shead by winning with a score of 64. Two games out of three must be yon, however, and the Hawaiians declare that they will even things up next Sunday.

Both teams are playing in good form, hitting hard and running fast. Several good catches and runs were made by both teams, but also numerous errors lost many points on each side.

PORKY FLYNN GIVEN TRIMMING BY FULTON IN TWENTY-ROUND GO

Pulton Iron Works of St. Louis, Babcock & Wilcox Company, Greens Puel Ecorondie; Company, Chas. C. Moere & Co., Engineers

Matson Navigation Company Toyo Risen Kaisha

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